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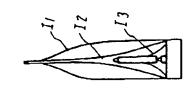
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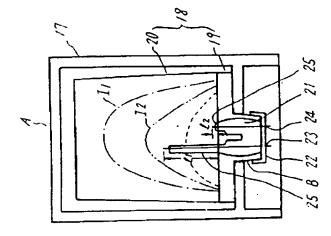
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TITLE ·

ELECTRODE STRUCTURE OF

DETECTING EMPTINESS OF INK





ABSTRACT :

PURPOSE: To fit an electrode detecting the emptiness of ink in simple structure, to set a detecting level for the emptiness of ink freely and to change a resistance value gently by varying the structure of the electrode detecting the emptiness of ink.

CONSTITUTION: A plurality of electrodes 23, 24 are each constituted in different length while the electrodes are covered with an insulating tube 25 so that only the tips of each electrode 23, 24 are exposed, and the electrodes are arranged on the fixing side of an ink bag 18 for an ink cartridge A. The sectional shape of ink gradually changes as l_1 , l_2 , l_3 as ink capacity in the ink bag 18 alters. Consequently, the gentle change of a resistance value between the electrodes through which a detecting level for the emptiness of ink is set easily is obtained. Accordingly, the emptiness of ink can be detected earlier by setting the detecting level for the emptiness of ink even when ink is not used completely as seen in conventional devices.

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